



an SKF Group brand

## Kaydon **infinite**<sup>®</sup> bearing solutions for Challenging Applications



# Diverse solutions for demanding designs

It takes more than quality and performance for a bearing to meet today's demanding design requirements. It takes truly innovative thinking, based in real-world experience. At Kaydon Bearings, that's just the beginning.

Kaydon Bearings offers:

- a wide range of bearing configurations and sizes
- standard and custom designs
- uncompromising precision and reliability
- success in hundreds of applications

- comprehensive technical support
- a 70-year commitment to customer satisfaction

At Kaydon, we specialize in meeting challenges to ensure product success. If you could use that sort of help, give us a call.

## Thin Section bearings

Real-Slim® thin section bearings are known for saving designers critical space and weight. They feature a cross-section that remains constant as the bore diameter increases, providing more dynamic capacity and longer life than standard bearings. This constant cross-section is especially valuable when you're designing a product to be manufactured in a variety of sizes.

Kaydon offers the industry's most comprehensive range of thin section bearings. Bore sizes range from 1" to 40" (25mm to 1m) and cross-sections from .187" x .187" to 1" x 1" (4.75mm to

25mm). Here is a summary of the styles available to solve your design problem.

- Radial
- Angular
- 4-point contact
- Metric
- Open
- Sealed
- Ultra-Slim® bearings
- Extra-light versions
- Stainless steel
- Corrosion resistant (e.g. Endurakote® plating)
- Duplexed face-to-face

- Duplexed back-to-back
- Ground for universal duplexing

Most of these can be provided with modifications, such as custom preload or internal fit, precision class upgrades, custom lubricants, and duplexed sets.

Real-Slim® bearings have saved space and weight in countless applications since Kaydon introduced the concept in the 1940s. Let us show you how they can solve your application challenge. You'll find specifications, performance data and more in our Catalog 300, available in print, or as a PDF file at [www.kaydonbearings.com](http://www.kaydonbearings.com).



# Kaydon **infinite**® bearing solutions

## Slewing Ring bearings

Kaydon slewing ring bearings transmit and rotate heavy loads precisely and reliably, in diameters of up to 26.25' (8m) and configurations to suit almost any application.

4-point contact ball bearings carry radial, axial and moment loads simultaneously and have integral seals to resist contamination.

8-point contact ball bearings provide up to 80% more load capacity than 4-point contact bearings, with many of the same features.

Cross-roller bearings offer exceptional stiffness with low rotational torque, in a smaller envelope than you might expect.

3-row roller bearings share the thrust, radial and moment loads between the rows, resulting in the highest capacity for any given diameter.

WireX® wire race roller bearings optimize space, weight and corrosion resistance with wire raceways in lightweight support rings. They work well with non-rigid and out-of-flat mounting structures.

For slewing ring specifications, ratings and application guidance, please consult Kaydon's Catalog 390. We'll be happy to send you a copy, or you can download a PDF file at [www.kaydonbearings.com](http://www.kaydonbearings.com).

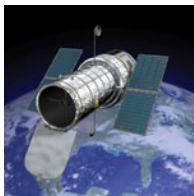
## **Other Bearings**

KT tapered roller bearings provide Kaydon's familiar space and weight saving advantages in applications requiring a tapered design.

Cylindrical roller bearings provide very high radial load capacity where axial load is not as critical.



# Proven in countless applications



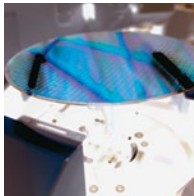
Applications	Thin Section Bearings	Slewing Ring Bearings	Roller Bearings	Wire X®
<b>Aerospace &amp; Defense</b>				
Camera mounts	■			
Gimbals/gimbal assemblies	■			
Instrument mounts	■			
Radars (fixed and mobile)	■	■		■
Satellite and radar antennas	■	■		
Telescope bases	■	■		
Truck mounted communication equipment	■			
<b>Aircraft (Jet fighters, Helicopters, UAVs, Airlift &amp; Cargo, Commercial)</b>				
Counter-measure systems	■			
De-icing sliprings	■			
Gatling gun bearings	■			
Landing wheels			■	
Mast, swash plate and gearbox bearings	■		■	
Navigation, target acquisition pods/FLIRS	■			
Propulsion and control systems	■		■	
Refueling booms, winches, APUs	■			
Rescue hoists	■			
<b>Ships</b>				
Carrier elevator and arresters		■	■	
Missile defenses	■	■		
Sonar, radar and communications	■	■		■
Submarine periscopes	■			
Torpedo deck mount launchers				■
<b>Ground Combat and Security Vehicles</b>				
Suspensions	■		■	
Target & sighting systems	■			
Transmissions	■		■	
Turrets	■	■		■
<b>Weapons</b>				
Guidance & propulsion systems	■			
Gun mounts and ammunition loaders	■	■	■	■
Missile and mortar launchers	■	■		■
<b>Space</b>				
Mars rover	■			
Satellite deployment spin table bearings	■			
Satellites (e.g. Hubble)	■			
Solar panel deployments	■			
Space stations	■			
Telescopes	■	■		
<b>Bulk Handling</b>				
Augers/reclaimers		■		
Bucket wheel excavators		■		
Spreaders		■		
Stackers/reclaimers		■		

# Kaydon **infinite** bearing solutions

Applications	Thin Section Bearings	Slewing Ring Bearings	Roller Bearings
<b>Industrial Machinery</b>			
Bottle/jar fillers	■	■	
Diamond wire saws	■		
Diaper paper manufacturing machines	■		
Food processing equipment	■	■	
Index and rotary tables	■	■	■
Knitting machinery	■		
Lift/pallet trucks	■	■	
Machine tools	■	■	■
Material handling equipment	■	■	
Offset printing machines	■		
Optical scanning and photographic equipment	■		
Packaging equipment	■	■	
Pallet wrappers	■	■	
Paper making dandy rolls	■		■
Robots and automation systems	■	■	
Rotary filling systems		■	
Scissor lifts		■	
Spinning machines	■		
Textile machinery	■		
Tire making machinery	■		
Welding positioners	■	■	
<b>Transportation</b>			
Aircraft de-icers		■	
Jetways/airline passenger bridges		■	
Locomotives and rail tie cranes		■	
Luggage security scanners	■		
Rail steering mechanisms		■	
Transfer tables		■	
<b>Municipal Equipment</b>			
Bridge inspection lifts		■	
Digger derricks		■	
Fire truck aerial ladders and snorkels		■	
Rotating bridges		■	
Utility cranes		■	
Water treatment - clarifiers, thickeners and rotary distributors		■	
<b>Medical Systems</b>			
CT scanners	■		
Human assist robotics	■		
Medical diagnostics equipment	■		
Oncology treatment machines	■		
PET scanners	■		
Robotic surgery devices	■		
X-ray equipment	■	■	
<b>Renewable Energy</b>			
Solar arrays altitude/azimuth positions	■	■	
Solar panel altitude - azimuth mountings	■		
Solar panel gear boxes	■	■	
Wind turbines - pitch/yaw positions		■	



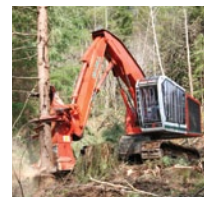
# Proven in countless applications



Applications	Thin Section Bearings	Slewing Ring Bearings	Roller Bearings
<b>Semiconductors</b>			
Atmospheric & vacuum transfers	■		
CVD systems	■		
Dicing equipment	■		
Die bonders, including flip chip	■		
Dispensing	■		
Etching systems	■		
Flat pannel display bonders	■		
Inspection equipment	■		
Lapping equipment	■		
LCD steppers	■		
Manipulators	■		
Measuring systems	■		
Mechanical polishers	■		
Megasonic cleaning systems	■		
Photolithography/lens diaphragms/stepper motors	■		
Pick and place robotics	■		
Positioners	■		
Probe stations	■		
Spin dryers	■		
Sputtering equipment	■		
Test heads	■		
Thin-film and vacuum deposition systems	■		
Wafer transfer robots	■		
Wafer scrubbers/polishers	■		
<b>Oil and Gas</b>			
Casing running tools	■		■
Coiled tubing units		■	
Downhole tools and motors	■		
Draw-works	■	■	■
Iron roughnecks	■	■	
Marine terminals (Buoys)		■	
Mooring systems		■	■
Pipe inspection equipment	■		
Riser assemblies		■	
Rotary steerable systems (RSS)	■		
Rotary tables		■	
Rotating control devices	■		■
Rotating drilling equipment	■	■	■
Rotating heads	■		■
Swivels	■	■	■
Top drives	■	■	■
Tubular handling equipment	■	■	■
Umbilical spools/reels		■	■
<b>Entertainment and Displays</b>			
Amusement rides		■	
Flight simulators	■	■	
Rotating rooms and buildings		■	
Rotating stages and trade show displays		■	

# Kaydon **infinite** bearing solutions

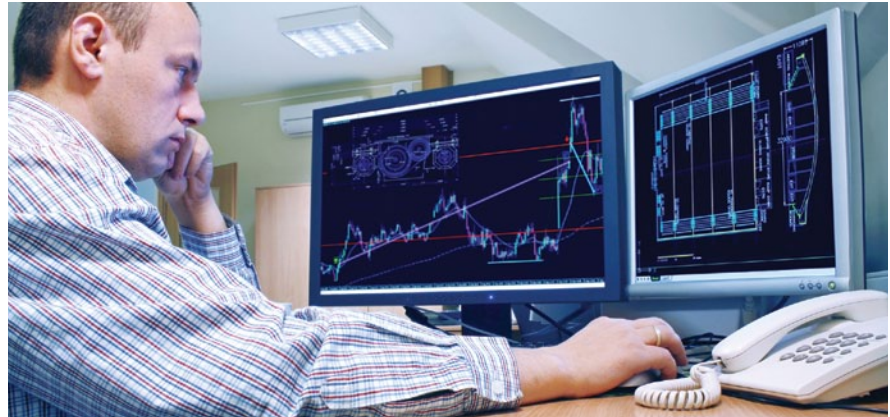
Applications	Thin Section Bearings	Slewing Ring Bearings	Roller Bearings
<b>Heavy Equipment</b>			
<b>Construction Equipment</b>			
Aerial work platforms/man lifts		■	
Articulating dump trucks		■	
Boom truck cranes		■	
Cement pumper trucks		■	
Concrete pumps and screeds		■	
Cranes - pedestal, tower, lattice, and knuckle boom		■	
Digger derricks		■	
Excavators		■	
Road paving equipment		■	
Semi tow trucks		■	
Tunnel boring machines		■	
Utility vehicles/bucket trucks		■	
<b>Steel</b>			
Crane hook and lift truck rotators		■	
Electric arc furnaces		■	
Ladle turrets		■	
Manipulators		■	
Turnstiles		■	
Uncoilers		■	
<b>Forestry</b>			
Chippers, debarkers and delimiters		■	
Feller bunchers		■	
Grapples		■	
Loaders		■	
Yard cranes		■	
<b>Mining</b>			
Bucket wheel excavators		■	
Continuous miners		■	
Haulage systems & scoops		■	
Hydraulic shovels		■	
Roof bolters		■	
Thickeners		■	
<b>Marine</b>			
Azimuth thrusters		■	■
Capstans	■	■	
Davits		■	
Offshore cranes (API 2C)		■	■
ROVs	■		
Ship loader/unloader		■	
Shipboard cranes		■	■
Straddle carriers		■	
Winches	■	■	



Kaydon  
**infinite**  
bearing  
solutions



# More reasons to specify Kaydon Bearings



## 1. Decades of diverse experience

Kaydon has been helping customers develop optimum product designs for seven decades, inventing the thin section bearing and pioneering a variety of innovative approaches. Our product engineers have a combined 300 years of experience (250 of them bearing-specific), and are as proficient in application engineering as they are in design engineering.

## 2. Highest quality standards – All Kaydon bearings are designed to demanding specifications and manufactured with the highest-

quality materials and processes. Key certifications include ISO 9001:2008, AS9100B, NADCAP, and various customer requirements.

## 3. Comprehensive technical support – The Kaydon R&D facility is home to the latest testing equipment for torque, vibration, sound, environmental effects, and more. You'll find 3-D CAD drawings and design software at our website. And should you ever need service, it's available in North America from our headquarters and overseas from qualified local distributors.



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